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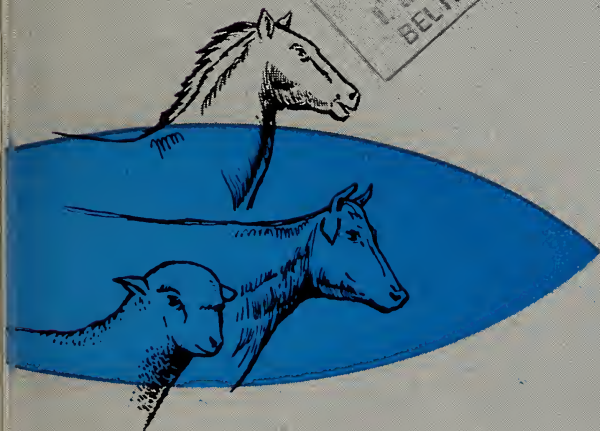
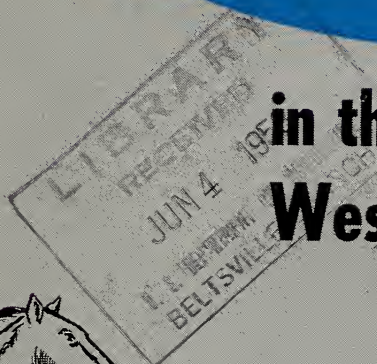
#316

# REDUCING LIVESTOCK LOSSES

from

*Bracken Fern*  
**POISONING**

in the  
**Western States**



PA-316

UNITED STATES DEPARTMENT OF AGRICULTURE

# REDUCING LIVESTOCK LOSSES

from

## Bracken Fern POISONING

### in the Western States

Bracken fern<sup>1</sup> is poisonous to cattle and horses. In cattle, poisoning is usually acute and is most likely to occur during the late-summer grazing period, when other feed is scarce. In horses, it usually occurs after animals have fed for several

weeks on hay containing considerable quantities of bracken.

Livestock losses are heaviest in eastern areas and in the States bordering the West Coast.

The leaves and other aboveground portions of the plant are poisonous.

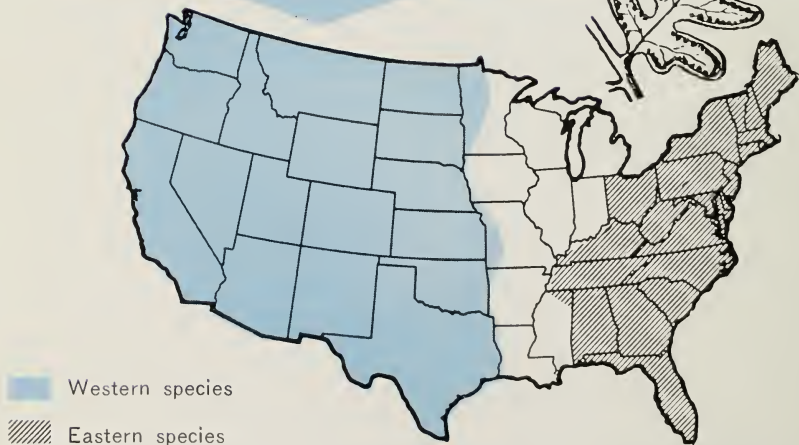
### Where and When It Grows

These plants grow on burned areas, in woodlands and other shaded areas, and on hillsides, open pastures, and ranges.

The plants start their growth in the spring, and usually they will remain green until the leaves are killed by frost.

<sup>1</sup> *Pteridium aquilinum* var. *pubescens*—found in western United States. *P. aquilinum* var. *latiusculum*—found in eastern United States.

### DISTRIBUTION OF BRACKEN FERN



Western species

Eastern species

Plant sketch from W. C. Muenscher, *Poisonous Plants of the United States*, The MacMillan Company, 1951





TN-2

Bracken fern has stout, black, horizontal root stalks. The leaves, or fronds, which grow directly from the root stalks, are broad, triangular, and divided into three main parts. Each part is segmented. The plant is a perennial and belongs to the fern family.

## How It Affects Livestock

Animals show effects of the poison only after eating considerable

quantities of bracken for 2 to 4 weeks.

### **In cattle, the symptoms are:**



1. High fever
2. Difficulty in breathing
3. Excessive salivation
4. Nasal and rectal bleeding
5. Congestion of the mucous membrane

### **In horses, the symptoms are:**

1. Yellowish tint on mucous membranes of eyes
2. Difficulty in breathing
3. Unsteady gait
4. Drowsiness
5. Dilated pupils
6. Constipation
7. Weak pulse
8. Nervousness
9. Twitching muscles
10. Extreme emaciation

## How To Reduce Livestock Losses

*Animals will seldom eat bracken fern if sufficient forage is available.* Livestock owners can practically eliminate losses by supplying sufficient forage, either on the pasture or in the form of hay. Supplemental feeding may be beneficial.

Some affected animals can be saved if poisoning is diagnosed early. They may respond to a laxative, such as a saline purgative, raw linseed oil, or mineral oil. Thiamine hydrochloride injected intra-

venously has been reported helpful in some early or chronic cases. The thiamine hydrochloride treatment should be given by, or under the direction of, your local veterinarian.

Bracken fern can be eradicated. In areas where cultivation is practicable, the plants can be destroyed by cultivating the soil 2 to 3 years. Alternate grazing has been reported effective in preventing abundant plant growth. Keeping tops cut to starve the roots is of value.

## Where To Obtain More Information

You can obtain more detailed information on bracken fern poisoning by getting in touch with your county agricultural agent or by writing to your State agricultural experiment station or to the U. S.

Department of Agriculture. Consult your local veterinarian if you have any questions regarding affected animals. *Note:* The map on page 2 shows areas where most livestock poisoning has been reported.

## *Know Poisonous Plants • Reduce Livestock Losses*

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Washington, D. C.

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